

MDOT's Storm Water Management Program

Illicit Discharge Elimination Program

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One component of MDOT's Storm Water Management Program is the Illicit Discharge Elimination Program (IDEP). MDOT's Storm Water Management program is helping to prevent pollution of Michigan's waterways by identifying, reporting and eliminating illicit discharges to the storm drainage system. The most common pollutant sources found connected to storm drains include sanitary sewer taps and washing machine hook-ups connected through a sump pump. There are several components to MDOT's IDEP program; they include inventorying storm water Point Source Discharges (PSDs), mapping PSDs, educating the general public and job-related staff, and tracking the removal of illicit discharges. If any of these terms are unfamiliar, please refer to the definitions at the end of this article.

Why does MDOT Care about Storm Water?

As storm water runs off of the land, it picks up pollutants such as oil and grease from cars, sediment from construction sites, and bacteria from pet feces. All of these materials end up in Michigan's surface waters causing environmental degradation. Storm water pollutants may affect water quality, recreational activities, aesthetic value, wildlife habitat, and the normal life cycle of organisms and animals.

Identifying Illicit Discharges

An illicit discharge is the discharge of pollutants or non-storm water materials to storm water drainage systems via overland flow or direct discharge of materials into a storm drain. Some examples of illicit discharges include:

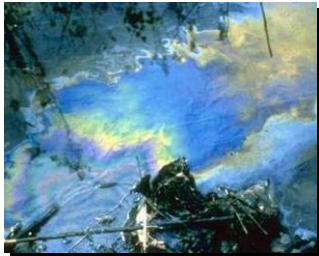
- Motor vehicle fluids
- Detergent
- Leaf litter
- Sewage
- Industrial waste
- Animal waste
- Commercial car wash flow



An illicit connection is the discharge of pollutants or non-storm water materials into a storm sewer system via a pipe or other direct connection.

Illicit discharges are often found during routine fieldwork, including road, bridge or sewer construction, maintenance and repair, and surveying work. So, as a contractor in the field, you play an important role in identifying and reporting problems in MDOT's storm water drainage system. The following is a list of the most common problems field staff encounter and the pollutant or observations associated with each discharge.

- **Sanitary Connections** – Sanitary flow has a distinct sewage odor. There may be visible evidence of sanitary waste, such as toilet paper, opaque or gray water, and black staining in the pipe.
- **Oil Sheen** – Oil sheen on water surfaces can be both from natural and man-made sources. Natural oils are often secreted from plants and the oil will separate if swirled or disturbed, whereas man-made products like petroleum will re-attach when swirled or disturbed.
- **Suds** – Soap suds are often a result of commercial car washing or washing machine connections. Natural suds also exist, however they are very dry and non-slippery to the touch.
- **Dry Weather Discharges** – When no rainfall has occurred for 72 hours or more, the storm drainage system should be dry. If dry weather flow exists, an illicit discharge may be present.



The presence of these observations does not guarantee that an illicit discharge exists; rather it warrants further investigation by trained personnel. To track IDEP issues, MDOT uses a database to record correspondence and investigations related to an issue.

Note: Sediment, a major pollutant in Michigan, is also considered an illicit discharge when it is washed into a waterbody. As construction sites are potential sources of sediment discharge, MDOT has in place a Soil Erosion and Sedimentation Control Manual which helps to minimize sediment discharges and addresses any problems that arise. Contractors are expected to deal with soil erosion and sedimentation problems according to this manual.

Some non-storm water discharges are acceptable. Here is a fairly comprehensive list:

- Water line flushing
- Landscape irrigation runoff
- Diverted stream flows
- Rising groundwater
- Uncontaminated groundwater infiltration
- Pumped groundwater
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Irrigation water
- Springs
- Crawl space pump water
- Footing drains
- Lawn watering runoff
- Non-commercial car washing
- Flows from riparian habitats and wetlands
- Residential swimming pool discharges and de-chlorinated pool discharges
- Residual street wash waters
- Discharges or flows from emergency fire fighting activities.

I see an Illicit Discharge...now what?

As a contractor in the field, if you come across or suspect an illicit discharge, notify the MDOT lead site inspector or the MDOT project engineer. MDOT has a system in place to track and follow-up on reported illicit discharges. If the situation is an emergency, call 911 or call the Pollution Emergency Alerting System (PEAS) at 1-800-292-4706. Individuals reporting an illicit discharge should gather the following information about the discharge:

- A description of the problem and why an illicit discharge is suspected.
- Where the discharge is located.
- An estimate of the extent of the problem. For example, is it a slow steady trickle or is it significant.
- Ideas (if you have them) on what will need to be done to clean it up or stop the problem.
- A photograph of the problem (if possible).

If you suspect a problem or illicit connection, do not touch the flow stream and make sure to follow all proper health and safety procedures.

MDOT's Storm Water Management Program is contributing to the prevention of pollutants being discharged to Michigan's waterways through its Illicit Discharge Elimination Program. MDOT is counting on you to report any suspicious or potential illicit connection to an MDOT employee, and to call 911 or PEAS in an emergency situation. More information and materials about illicit discharges are available online at www.michigan.gov/stormwatermgt - click on "Illicit Discharge" or "Educational Materials."

Helpful Definitions

Point Source Discharge – A point source discharge (PSD) is an outlet from a drainage system to waters of the state, or a point where the storm water drainage discharges into a system operated by another public entity. Examples include a structural outfall, constructed swales, or a pipe discharging to another entity's drainage system.

Illicit Discharge – Any discharge (or seepage) to the separate storm water drainage system that is not composed entirely of storm water or uncontaminated groundwater.

Storm Water – Storm water is water that accumulates on land as a result of rainfall events.

Waters of the State – The Great Lakes and their connecting waters, all inland lakes, rivers, streams, impoundments, open drains, and other surface bodies of water within confines of the state.